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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/149,424	09/08/1998	JEAN GAUTIER	1948-4541	5010

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EXAMINER	
TAMAI, KARL I	
ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 07/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/149,424	GAUTIER, JEAN	
	Examiner	Art Unit	
	Tamai IE Karl	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 September 1998* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/7/03 has been entered. The After-Final Amendment filed 1/6/03 has been entered, pursuant to MPEP 706.07(h)(D).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the casing consisting of metal must be shown or the feature canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC ' 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does not have a full, clear, concise, and exact written description of the diode casing consisting of metal, or being metal and only metal.

5. The rejection of Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, is withdrawn.

Claim Rejections - 35 USC ' 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 1-7 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fabel et al. (Fabel)(US 3370207) and Richards (US 3,812,390) and Namba et al. (Namba)(US 4,472,649). Fabel teaches a plinth 24 for supporting a diode, the diode having a casing consisting of metal 23 soldered/brazen to the plinth 24. The plinth 24 having a plug portion 13 having an upper face and defining an axis at a right angle to the upper face; and an abutment portion contiguous with the plug portion and projecting upwardly from the upper face of the plug portion in the direction of the axis, the

abutment portion having a cavity at its upper face for receiving one end of the diode casing 23, wherein a radius of the plug portion 13 is smaller than a radius of the abutment portion. Fabel teaches every aspect of the invention except the metal housing 23 secured to the plinth by welding and the plug portion which is press fit. Richards teaches the equivalence of welding or soldering for securing diodes. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the diode of Fabel with the diode welded instead of soldered because it is within the ordinary skill in the art to choose between known equivalents and because Richards teaches it allows for easy replacement, and with the plug portion being press fit to mount them in through holes as taught by Namba.

8. Claim 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fabel et al. (Fabel)(US 3370207) and Richards (US 3,812,390) and Namba et al. (Namba)(US 4,472,649), in further view of Mori et al.(Mori)(US 5,828,564). Namba, Matthai, Richards, and Hagnetlocker teach every aspect of the invention except the hole being a blind hole. Mori teaches the diode mounted on a plinth 310 in a blind hole to allow thermal dissipation from under the diode. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba, Matthai, Richards, and Hagenlocher with a blind diode hole to allow thermal dissipation from under the diode.

9. Claim 1, 2, 4-7, and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), and Richards(US 3,812,390). Namba teaches diodes (70a, 70b figure 11) fixed to a cylindrical plinth 68, 76 with a plug portion force fit into an aperture and an abutment portion outside the aperture with a larger diameter than the plug portion and the aperture. The abutment portion between the plug portion and the diode. Namba teaches every aspect of the invention except the diode having a housing welded to the plinth. Matthai teaches the diode CH having a housing E1 (figure 3b) consisting of metal, which is also an electrode. Matthai does not teaches the diode housing being fixed by welding. Richards teaches the diodes fixed to a metal plate by welding to allow easy replacement. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba with the diode housing of Matthai to protect the diode and with the housing fixed to the plinth by welding to allow easy replacement as taught by Richards.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), and Richards(US 3,812,390). Namba teaches both an abutment portion with a cavity(figure 12) and an abutment portion which is larger than the plug portion(figure 11) providing an electrical connection, but does not teach the two together. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba, Matthai, and with the diode in a cavity as shown in Namba figure 12 with the

outwardly extending abutment arms of figure 11 to provide a convenient place to provide axial and radial friction forces between the plug and the housing to securely hold the plith.

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), and Richards(US 3,812,390), in further view of Hagenlocker et al.(Hagenlocker)(US 4,286,186). Namba, Matthai, and Richards teach every aspect of the invention except the plug portion fit into a hole of an alternator support which is on the opposite the stator. Hagenlocher teaches the diodes mounted on a support with a hole on the opposite side of a stator. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Namba, Matthai, and Richards with the support of Hagenlocher to utilize the diodes in an alternator.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Namba et al.(Namba)(US 4,472,649), Matthai(US 4,321,664), Richards(US 3,812,390), and Hagenlocker et al.(Hagenlocker)(US 4,286,186), in further view of Mori et al.(Mori)(US 5,828,564). Namba, Matthai, Richards, and Hagnetlocker teach every aspect of the invention except the hole being a blind hole. Mori teaches the diode mounted on a plinth 310 in a blind hole to allow thermal dissipation from under the diode. It would have been obvious to a person of ordinary skill in the art at the time of the invention to

construct the machine of Namba, Matthai, Richards, and Hagenlocher with a blind diode hole to allow thermal dissipation from under the diode.

Response to Arguments

13. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new grounds of rejection. Applicant's argument regarding the casing of Matthai is not persuasive because the claims do not structurally set forth requirements for the casing, such that the electrode E1 is a casing consisting of metal and because the specification does not have support of the casing consisting of metal.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703)308-1371. The facsimile number for the Group is (703)305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
July 22, 2003